

**Performance Audit
Payroll**

November 2003

City Auditor's Office

City of Kansas City, Missouri

November 18, 2003

Honorable Mayor and Members of the City Council:

This performance audit of the city's payroll system was initiated by the City Auditor pursuant to Article II, Section 13 of the City Charter. Payroll systems are highly susceptible to fraud. One method of accomplishing payroll fraud is through the use of "ghost" employees, whereby someone who does not actually work for the organization receives pay. This performance audit sought to identify city paychecks going to fictitious or nonexistent employees.

We did not identify any city funds lost to payroll fraud. We confirmed the existence and identities of all city employees in our sample, as well as the identities of all employees who list a post office box as their home address. Additional tests for payroll fraud using the personnel and payroll databases and investigations of anomalies in these records did not identify any payroll fraud.

The city has several payroll system controls in place that limit the potential for payroll fraud, but additional controls are needed. Contract employees remain in the payroll system long after their contracts have expired, contract employees with invalid employee status codes are listed in the personnel database, and personnel record modifications include inaccurate information. We recommend the Director of Human Resources remove contract employees with invalid employee status codes and establish a system for data entry that ensures accurate modifications to employee personnel records. We also recommend the Director of Finance establish procedures to routinely remove contract employees from the payroll system once their contracts have expired.

A draft of this report was sent to the City Manager and the Finance and Human Resources directors on September 12, 2003. Management's response is appended. We appreciate the courtesy and cooperation extended to us by city staff throughout the audit. We especially want to thank Kathleen Whalen and Tamela Handie-Tilford of Aviation, Roy Greenway of the City Manager's Office, Rusty Williams and R. W. Thompson of the Finance Department, Janice Gordon of Parks and Recreation, and Sean Hennessy of Water Services for their participation in this project. The audit team for this project was Douglas Jones, Robin K. Reed, Julia Talauliker, and Gary White.

Mark Funkhouser
City Auditor

Performance Audit: Payroll

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Introduction

Objectives

This performance audit of the city's payroll system was conducted pursuant to Article II, Section 13 of the Charter of Kansas City, Missouri, which establishes the Office of the City Auditor and outlines the City Auditor's primary duties.

A performance audit is an objective, systematic examination of evidence to independently assess the performance of a government organization, program, activity, or function in order to provide information to improve public accountability and facilitate decision-making.¹ This audit was designed to answer the following question:

- Are any city paychecks going to fictitious or nonexistent employees?

Scope and Methodology

Our review of the payroll system focused on confirming the existence and identities of a sample of city employees.² We also sought to identify weaknesses in payroll controls.

The audit was conducted in accordance with generally accepted government auditing standards. Methods included:

- Drawing a sample of city employees identified as receiving pay on March 1, 2002.
- Contacting the sampled employees to confirm their identities and inquire about any problems they have experienced in payroll processing.

¹ Comptroller General of the United States, *Government Auditing Standards* (Washington, DC: U.S. Government Printing Office, 1994), p. 14.

² Police department employees were not included.

- Analyzing data from the city’s payroll system and Human Resources Department’s personnel records to identify irregularities for further investigation.
- Reviewing literature and current payroll controls to identify control weaknesses.

Detecting fraud. We contacted other auditors and researched accounting, auditing, and fraud-related websites to develop a list of tests that could be used to detect payroll fraud. Based on our research, we incorporated the following procedures and tests into our audit:

- Conduct a controlled payroll distribution.
- Confirm the identity of all employees using a P.O. box as an address.
- Identify and investigate employees with no benefit deductions.
- Identify and investigate multiple direct deposits to the same bank account.
- Identify and investigate duplicate names, addresses, and social security numbers.

No information was omitted from this report because it was deemed privileged or confidential.

Background

Legislative Authority

The city charter assigns responsibility for “disbursement of all city monies” to the Finance Director.³ The charter prohibits the Finance Director from paying the employees listed on the payroll unless the Human Resources Director certifies that the employees are officers or employees of the city.⁴ In addition, the Code of Ordinances allows the City Auditor to distribute the payroll without advance notice, and requires the Human Resources Director to dismiss any employee who fails to comply with the city’s residency requirement.⁵

³ Charter of Kansas City, Missouri, Art. IV, Sec. 77.

⁴ Charter of Kansas City, Missouri, Art. V, Sec. 118.

⁵ Code of Ordinances, Kansas City, Missouri, Sec. 2-204 and Sec. 2-972.

Payroll System

The Information Technology Department maintains the city's legacy payroll system. The system has existed in approximately its current form since 1971. The Enterprise Resource Planning system (K.C. CREW) being implemented by the city will include a new payroll system.

Employee data. Employees are paid for hours worked based on information from two databases – the Human Resources personnel database and the payroll database. The Human Resources personnel database includes personal information such as employee name, address, and social security number, and job-related information such as department, job class, and organization codes. The payroll database includes information on employees' hours worked, hourly pay rate, benefit deductions, taxes, and exemptions. Human Resources' and the Finance Department's payroll staff enter and maintain information in their respective databases.

Adding employees to the payroll system. The city has five categories of employees:

- Full-time
- Part-time (budgeted less than 80 hours bi-weekly)
- Seasonal (limited to six months)
- Contract (with health insurance)
- Contract (without health insurance)

Full-time, part-time, and seasonal employees are added to the payroll system after department staff complete and sign personnel transaction forms. Contract employees are processed through contracts and encumbrances for these contracts.

Posting work hours. When full-time employees are added to the system, their normal work hours are recorded in the payroll system. When posting payroll, timekeepers only record instances when employees did not work their normal hours due to vacation, sick leave, or other reasons. For contract employees, the timekeeper records the gross pay for the employee based on the hours worked and the employee's hourly wage.

Payroll processing. Once timekeepers have completed their postings, the payroll information is transmitted to the Information Technology Department, which prepares paychecks or earnings statements (for employees with direct deposit). Department staff pick up the paychecks and earnings statements from payroll and handle their distribution.

Payroll Fraud

Manipulating payroll is one of the most common forms of fraud.⁶ One method of accomplishing it is through the use of “ghost” employees, whereby someone who does not actually work for the victim company receives pay. Through the falsification of personnel or payroll records, a fraud perpetrator causes paychecks to be generated to a fictitious person or a real individual who simply does not work for the victim employer. When the ghost is a real person, it is often a friend or relative of the perpetrator.⁷ Ghost or fictitious employees could be added to the payroll system as new employees or by not removing terminated employees.

In order for a ghost employee scheme to work, four things must happen:

- The ghost employee must be added to the payroll (or a departing employee is not removed from the payroll system).
- Timekeeping and wage rate information must be collected.
- A paycheck must be issued to the ghost.
- The check must be delivered to the perpetrator or an accomplice.⁸

Payroll Fraud Losses Can Be Substantial

In June 2003, a consultant working for the New Orleans School District reported that approximately \$7 million a year was being lost to “ghost” employees. Checks made out to more than 300 names that previously were being cashed regularly were not claimed once employees were required to provide identification to pick them up. None of the names were verified as school employees.

Source: Brett Martel, The Associated Press, “Auditors, investigators trying to find millions in Orleans school funds,” June 22, 2003, retrieved from http://www.wlvtv.com/cgi-bin/gold_print.cgi, on July 28, 2003.

⁶ Fishman, Neil H., “Signs of Fraud: A Case by Case Review,” *The CPA Journal*, March 2001, retrieved from <http://www.nysscpa.org/cpajournal/2001/0300/dept/d035801.htm>, on February 12, 2002, p. 1.

⁷ Association of Certified Fraud Examiners, “Ghost Employees,” *The White Paper*, Volume 15, Number 3, May/June 2001, p. 28.

⁸ Association of Certified Fraud Examiners, “Ghost Employees,” p. 28.

Findings and Recommendations

Summary

We did not identify any city funds lost to payroll fraud. We were able to confirm the existence and identity of all city employees in the sample we tested, as well as all employees listing a post office box as their home address. Additional tests for payroll fraud using the personnel and payroll databases and investigations of anomalies in these records also did not identify instances of payroll fraud.

The city has several payroll system controls that limit the potential for payroll fraud, including restricted access to critical information and multiple required confirmations. Additional controls are needed, however, to further protect the city against the risk of payroll fraud.

We recommend the Director of Human Resources remove contract employees with invalid employee status codes from the personnel database and establish a system for data entry that ensures modifications to employee personnel records are accurate. We also recommend the Director of Finance establish procedures to routinely remove contract employees from the payroll system once their contracts have expired.

Tests Disclosed No Evidence of Payroll Fraud

The tests we performed did not identify any evidence of payroll fraud through the use of fictitious employees. We identified a sample of almost 300 employees who received paychecks on March 1, 2002, and attempted to visit each at their worksite to verify their existence. We also investigated instances of duplicate names, addresses, social security numbers, or direct deposit accounts; made in-person visits to all employees whose personnel information did not list a home address; and analyzed various other anomalies found in city databases. None of these tests identified instances of payroll fraud. Our investigation provided us with 95 percent confidence that no fictitious employees received pay on the day sampled.

Tests Confirmed Existence of All Employees in Sample

Our in-person visits to a sample of the employees who received paychecks on March 1, 2002, did not identify any fictitious employees receiving pay. In addition to City Auditor's Office staff, staff from the Aviation, City Manager's Office, Finance, Parks and Recreation, and Water Services departments assisted our efforts to confirm the existence of the selected employees.

Sample selection. In order to identify fictitious employees receiving city pay, we selected a random sample of 291 of the 4,898 employees who received pay on March 1, 2002. (See Exhibit 1.)

Exhibit 1. Total Employees per Department and Employees Sampled

Department	Total Employees	Employees Surveyed
Aviation	417	21
City Auditor's Office	19	0 ⁹
City Clerk's Office	9	0
City Planning and Development	76	3
City Manager's Office	60	5
Codes Administration	105	4
Convention and Entertainment Centers	201	15
Environmental Management	103	4
Finance	162	16
Fire	865	50
Health	184	6
Housing and Community Development	38	3
Human Relations	29	1
Human Resources	37	2
Information Technology	84	6
Law	78	6
Mayor/Council	43	3
Municipal Court	77	5
Neighborhood and Community Services	268	22
Parks and Recreation	554	36
Public Works	584	36
Water Services	905	47
Totals	4,898	291

Source: Payroll Database for the paychecks received on March 1, 2002.

We calculated the sample size to provide 95 percent confidence of finding at least one fictitious employee, assuming that at least 1 percent

⁹ Staff in the City Auditor's Office were removed from the list of employees before the sample was drawn.

or about 50 fictitious employees received pay on March 1st.¹⁰ If a single fictitious employee was identified, additional employee visits might have been completed to better determine how many fictitious employees received pay, along with additional audit work to determine how the fictitious employees were added to the payroll system.

While the sample results do not guarantee that there are no fictitious employees, they provide 95 percent confidence that if any exist, there are less than 50 of them. In addition, the results provide 90 percent confidence that there are less than 39 fictitious employees and 85 percent confidence that the number of fictitious employees is 34 or less.

Once the actual sample was chosen, members of the project team identified 59 (approximately 20%) of the employees selected. Employees familiar to the team did not require an in-person visit.

Test procedures. Project team members began visiting the remaining 232 employees at their work sites on April 11, 2002. Visits were completed by April 26, 2002. Contact with some employees required multiple visits due to differing schedules, vacations, and illnesses. We were unable to meet some employees due to retirements, suspensions, resignations, or injury. In these cases, other methods were used to confirm the employee's existence.

Project team staff asked employees to produce picture identification such as a driver's license or City of Kansas City identification, and record his/her home address and birth date on an employee verification form. Team members asked employees three questions:

- How long have you worked for the city?
- How do you normally receive your pay?
- Have you ever had problems receiving your paycheck?

Answers to the three questions and any other comments by the employee were recorded on the form, which the employee was asked to review for accuracy, sign, and date. A copy of the employee verification form can be found in Appendix A.

No fictitious employees were found. We confirmed the existence of all the employees in our sample and are 95 percent confident that all the employees paid on March 1, 2002 were legitimate employees.

¹⁰ Employees already known by the project team would not require an in-person visit. During an earlier sampling test, members of the project team knew 25 percent of the employees selected. As a result, the sample size was increased to provide greater precision.

Other Payroll Tests Did Not Identify Fraud

None of the other payroll tests of information contained in the Human Resources and payroll databases identified any instances of payroll fraud. We examined instances of duplicate names, addresses, social security numbers, or direct deposit accounts; all employees whose personnel information did not list a home address; and other anomalies that could be indicators of fictitious employees.

Tests of duplicate instances did not identify payroll fraud. Using the personnel history records as of March 19, 2002, and the payroll records as of March 1, 2002, we investigated instances of duplicate names, addresses, social security numbers, and direct deposit account numbers. Our investigation did not identify any instances that appeared to be fraudulent.

- **Names.** Payroll records identified 126 cases of duplicate first and last names, 18 of which also had the same middle name. All duplicates had different social security numbers and were traced to parents and children, both city employees, who share the same name.
- **Addresses.** Records identified 239 cases of duplicate addresses. In each instance the employee names and social security numbers were different. All were identified to reflect two or more employees living at the same address.
- **Social security numbers.** Five duplicate social security numbers were identified. All were determined to be double entries for inactive employees.
- **Direct deposit account numbers.** Records identified 36 duplicates account numbers for direct deposit of payroll checks. All had differing social security numbers, but in all instances the two employees shared the same last name and most shared an address.

Employees with P.O. boxes were verified. The project team applied an extra step to verify the existence of the 32 city employees included in the sample whose personnel records listed post office boxes rather than home addresses.

Six of these employees were already known to the project team. The project team asked the remaining 26 employees to provide two forms of

picture identification, instead of the one requested of the other employees in the sample. We confirmed the identity of all 26 P.O. box holders.

Analysis of anomalies did not identify fraud. In reviewing the information found in the personnel and payroll databases, we sought to resolve anomalies found in the databases that could also signal payroll fraud.

- **Invalid status code.** According to Human Resources staff, each employee record should have a status code of “A” for active or “I” for inactive. However, 1,452 employee records had an “R” code. Human Resources staff could only determine that all the employees with this “R” code were contract employees that should not be part of the database.

Staff in the Information Technology Department could only explain the inclusion of these employees as a “glitch” in the system. All of these records were last modified on or before 1990. None of the employees received pay for working during the period of our review. None of the instances were identified as payroll fraud. We recommend the Human Resources Director ensure these employees are removed from the personnel database.

- **Inactive employees.** Payroll records identified 52 of the employees paid on March 1, 2002, while listed as “inactive” employees. It is expected that only “active” employees are eligible to be paid. Most of the employees listed as inactive were determined to have left city service after the pay period ended. Others were listed incorrectly due to inaccurate modifications to the personnel records. None of the instances were identified as payroll fraud.
- **Employees with few deductions.** Payroll records identified 68 employees who had FICA deductions but no deductions of federal or state taxes, pension, or health insurance. All these employees were determined to be seasonal, part-time, or contract employees who are ineligible for health benefits or city pensions and can choose not to have federal or state tax deductions. Fifteen employees did not have FICA deductions. According to the city’s paymaster, exemptions from FICA are rarely approved. In the 15 cases, the employees had deductions for federal, state and city taxes, pension, and/or health insurance contributions. None of the instances were identified as payroll fraud.

Employees Reported Few Payroll System Complaints

When asked about problems in receiving their paychecks, 200 of the 212 employees visited reported that they had not experienced any difficulties. However, a number of employees also commented on issues surrounding payroll distribution.

For example, at the time our surveys were conducted, the city had recently begun issuing paychecks and earnings statements in sealed envelopes. Several of those surveyed expressed appreciation of this change, citing previous privacy concerns. Complaints focused instead on related aspects of the system, such as the methods some departments use to distribute paychecks; discrepancies in recording overtime hours, free day, vacation, or sick leave; or difficulties understanding the information found on the check stub.

Controls Reduce Fraud Opportunities But Additional Safeguards Needed

Several payroll system controls exist that limit the potential for payroll fraud to be committed. However, additional safeguards need to be implemented in order to further reduce the risk that such fraud could occur.

Existing Controls Limit Fraud Opportunities

Several payroll system controls limit the potential for payroll fraud. Department staff confirm recorded employee work hours prior to payroll processing. Access to direct deposit account information is limited. Data entry controls exist for initial entry of personnel records and establishment of direct deposit accounts. Control totals are used. Contract employee payments require confirmation of current contracts and available funding balances.

Department staff confirm data entry. Department payroll clerks receive time audit sheets on the Monday before paychecks are printed. Using these sheets, department personnel have an opportunity to review the data entry for employee hours recorded for their personnel and make any corrections. Once completed, the time audit sheets are returned to payroll.

Direct deposit account safeguards exist. When payroll staff establish new direct deposits for employees, data entry controls require double entries to ensure accuracy. In addition, access to the account numbers of

employee direct deposit accounts is limited to three individuals to maintain confidentiality and accountability.

Control totals detect payroll manipulation by Information

Technology staff. Payroll staff prepare control totals before transferring payroll information to the Information Technology Department for processing. When processing is completed and the payroll information is returned to payroll for verification, the control totals provide assurance that the payroll was not increased during processing.

Contract employee payments depend on available resources and

unexpired contracts. Payments to contract employees require an available balance that is greater than the gross wages entered. During payroll processing, the system confirms the contract has not expired. These controls assure that contract employees only receive pay during the terms of their contract, and the total payments do not exceed the agreed to contract amount.

Data entry in the personnel database is based on original documents.

The city's 2001 annual audit included a comparison of social security numbers. Six of the city's employees were identified with invalid social security numbers. Two of the six discrepancies were traced to data entry errors. The remaining four were traced to employees submitting falsified social security cards. In response to this finding, Human Resources staff began confirming the accuracy of data entry, and began requiring original social security documents be used for identification.

Identified Control Weaknesses Should Be Addressed

A couple of control weaknesses exist that increase the risk that payroll fraud could be committed. Contract employees remain in the payroll system long after their contracts have ended. Modifications to personnel records may contain inaccurate information.

Former contract employees should be removed from payroll records.

The payroll database for the employees receiving pay on March 1, 2002, listed 6,095 persons, including 1,392 contract employees. While full-time employees are removed from the payroll system shortly after leaving city employment, contract employees remain for a number of years.

We searched the payroll database for contract employees who worked for the City Auditor's Office in recent years. Five contract employees from this office were listed. Only one is still employed. One person has not worked for the City Auditor's Office since 1996.

Payroll staff report contract employees are not removed from the system in case they later return to city employment. They also point to existing safeguards that prevent contract staff from being paid without current contracts on file and available fund balances for payments as adequate controls to prevent these former employee records from being used to commit payroll fraud. Despite these safeguards, we recommend the Finance Director establish procedures to ensure contract employees with expired contracts are routinely removed from the payroll database.

Verification of personnel record modifications is limited. Human Resources staff report increasing controls to assure the accuracy of data entry for new employees. Subsequent modifications to personnel information, however, are not similarly verified. Personnel transaction forms can be used to modify existing personnel records for promotions, transfers, retirements, etc., as well as changes in employee information or benefits (changing addresses, phone numbers, health insurance, insurance beneficiaries or employee emergency contacts).

While the Human Resources staff making the modifications are able to double check the accuracy of their changes, they do not routinely check each other's work. Relying on the same person to make the change and confirm it was made accurately provides only limited assurance. We recommend the Human Resources Director establish a method of verifying data entry accuracy for personnel record modifications.

Recommendations

1. The Director of Human Resources should ensure contract employees with invalid status codes are removed from the personnel database.
2. The Director of Finance should establish procedures to routinely remove contract employees from the payroll system once their contracts have expired.
3. The Director of Human Resources should establish a system for data entry that ensures modifications to employee personnel records are accurate.

Appendix A

Employee Verification Form

Employee Verification Form

Department: _____

Employee name: _____

P.O. Box (if applicable): _____

Completed by Employee

Home Address: _____

Birth date: _____

I was an employee of the City of Kansas City, Missouri during the period March 24 to April 5, 2002,
and I certify that the above information is correct.

Employee Signature: _____

Completed by VerifierIdentification reviewed: ☐ City/Department ID☐ Driver's License☐ Other _____

(Please describe)

1. How long have you worked for the city? _____

2. How do you normally receive your paycheck? _____

3. Have you ever had problems receiving your paycheck? _____

NOTES: _____

Employee Verification by: _____ Date: _____

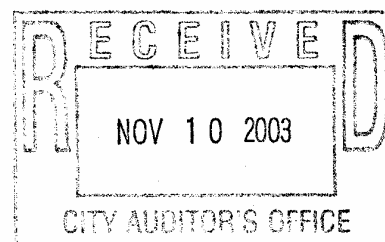
Appendix B

City Manager's Response



Interdepartmental Communication

DATE: November 4, 2003
TO: Mark Funkhouser, City Auditor
FROM: Wayne Cauthen^{W.C.}, City Manager
SUBJECT: Response to the Performance Audit on Payroll



The recently completed payroll audit conducted by your department surfaced three recommendations that require response from the Departments of Finance and Human Resources. I have solicited comments from the Directors of Finance and Human Resources. Those comments take into account the context of the entire audit and the scheduled implementation of the city's new human resources information system project (KC-CREW). Detailed responses to the three recommendations in the performance audit report are below.

Recommendation 1: *The Director of Human Resources should ensure contract employees with invalid status codes are removed from the personnel database.*

Response: The Human Resources Department agrees with this recommendation and has forwarded a work request to the Information Technology Department *Helpdesk* to have the contract employees with invalid status codes removed from the database.

Recommendation 2: *The Director of Finance should establish procedures to routinely remove contract employees from the payroll system once their contracts have expired.*

Response: The Finance Department agrees with this recommendation and has, in fact, implemented a remedy prior to the issuance of the audit report.

On an annual basis a payroll job runs to purge inactive records from the payroll master file and store those records on the history file. Finance Department staff was aware of the availability of this routine for regular employee payroll records. In the summer of 2002 the Finance Department staff discovered that this capability was available for contract employee records as well. The Finance Department staff completed entries to delete nearly 1,400 inactive records on the payroll file and the Information Technology Department ran a special routine to move the inactive records to the history file. More recently, the Human Resources Department staff requested a change in processing that provides the same capability to move inactive contracts records from the active payroll master file to the history file.

Recommendation 3: *The Director of Human Resources should establish a system for data entry that ensures modifications to employee personnel records are accurate.*

Response: The Human Resources Department agrees that redundant/independent verification of data entry to employee records is desirable. Currently the Human Resources Department provides independent verification of data entry of certain modifications to employee records that are deemed critical and/or significant (i.e. changes to pay or actions that potentially affect the status of an employee). The Department of Human Resources anticipates that with the implementation of the PeopleSoft HRIS, data entry will occur in the field by authorized employees, approval of employee personnel data entries will be made by authorized field supervisors, and Human Resources personnel will assume responsibility for monitoring and final approval of the personnel data modification that is made. Human Resources is scheduled to go live on the PeopleSoft KC-CREW project in the 4th quarter of 2004.

cc: Kevin Riper, Director of Finance
John Thigpen, Director of Human Resources